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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/009,909      | 02/20/2002  | Christoph Schwemler  | Mo6846/LeA 33,663   | 8764             |

157 7590 06/01/2004

BAYER POLYMERS LLC  
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PITTSBURGH, PA 15205

EXAMINER

PHASGE. ARUN S

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1753

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/009,909

Applicant(s)

SCHWEMLER ET AL.

Examiner

Arun S. Phasge

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeniwa of record in view of Bennett of record.

Shigeniwa discloses the claimed method for the treatment of water having the TOC and containing carbonic acid with ozone, wherein the treatment occurs at a temperature range, pressure range and pH value range and time period which falls within the claimed values (see translation of the claims and pages 2-3). The reference further discloses the relationship between pH and the amount of zone added as well as the amount of the TOC (see bottom of page 3).

The reference does not disclose that the water is the wastewater from a bisphenol A polycarbonate product facility. The invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to use the process disclosed in the Shigeniwa reference, because the wastewater being treated contains essentially the same composition as the raw water treated in the Shigeniwa reference.

The reference further does not disclose the amount of chloride in the water. The reference further does not disclose the use of the treated water in the electrolysis of water to form chlorine in a membrane cell.

The Bennett patent is cited to show the use of brine that has been pre-treated by the addition of the claimed oxidant in a membrane cell to form chlorine (see abstract and col. 1, lines 60-68). The reference further discloses the range of the salt as claimed (see col. 4, lines 30-36).

Consequently, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made by modifying the disclosure of Shigeniwa patent which discloses the purification of water containing contaminants by the addition of ozone with the teachings contained in the Bennett patent, because the Bennett patent teaches that such purification of water containing oxidizable impurities by the addition of oxidants, such as ozone, produce a purified salt containing water that can be electrolyzed to produce chlorine.

### ***Response to Arguments***

Applicant's arguments, filed 5/6/04, with respect to claims 1, 5-7 have been fully considered and are persuasive. The final rejection of the claims has been withdrawn.

Applicant's arguments with respect to claims 1, 5-7 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicants argue that the elements of the present invention are old, and that the combination as presently claimed has not been disclosed. The examiner has demonstrated above that one having ordinary skill would have been motivated by the combination of references to use a purified salt containing solution to produce chlorine, because the Bennett patent teaches such a use.

### ***Conclusion***

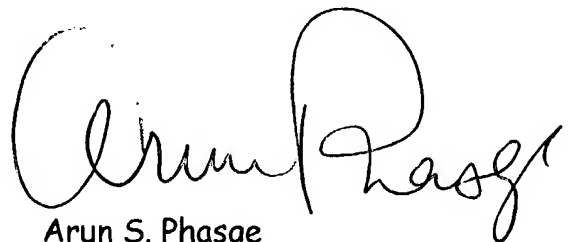
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is

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(571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Arun Phasge', with a large, stylized loop at the end.

Arun S. Phasge  
Primary Examiner  
Art Unit 1753

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